Curriculum Vitae Jae N. Lee

1. Contact:

Aerosol and Cloud Group

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Email: Jae.N.Lee@jpl.nasa.

2. Gender: Female

3. Education:

2003.9-2008.6: Ph. D Student and Research Assistant. School of Marine and Atmospheric Science, Stony Brook University.

Thesis Topic: Changes in Atmospheric Circulation between

Solar Maximum and Minimum Conditions in Winter and

Summer

Thesis Advisor: Prof. Sultan Hameed. **PhD thesis defense date**: 2008.3

- **1993.9-1994.1:** Part Time Student, University of Washington, Seattle, USA, in atmospheric science.
- 1986.1-1988.1: Master Degree in Atmospheric Science,

Stony Brook University.

Thesis Topic: Line by line calculation of H_2O absorption spectra near

infrared.

Thesis Advisor: Prof. Robert D. Cess

• 1980.3-1984.2: BS in Physics, Yonsei University, Seoul, Korea.

4. Experience:

- 2003.9-2008.6: Research Assistant
 School of Marine and Atmospheric Science, Stony Brook University

 Job description: Research on the Northern Annular Mode and its relation to solar forcing in the reanalysis and the GCM model.
- **1994.9-1995.9**: Part time Public employee Korean Meteorological Administration, Long term forecast department.

Job description: Mesoscale forecast modeling

• 1991.9-1992.12: Full time Public employee, Atmospheric Scientist.

Korean Meteorological Administration.

Job description: Development of background CO_2 monitoring system

• **1988.9-1990.2**: Research Scientist

Science System & Applications, Inc.,

Lanham, MD.

Job description: Baseline Upper Air Network (BUAN) and TOVS data processing at Satellite Research Lab. (SRL) /NOAA.

• **1988.1-1988.9**: Research associate

Atmospheric Science group, Stony Brook University.

Job description: Research assistant for Prof. R.D. Cess in ERBE project

• **1986.1-1988.1:** Research assistant.

Atmospheric Science group, Stony Brook University.

Job description: Master degree work

5. Skills:

- Good computer and communication skills gained from graduate studies and previous work experience
- Ability to access and analyze the GCM model outputs
- global climate trend related research
- Extensive experience in statistical analysis.

6. Journal Publications:

- Jae N. Lee, Dong L. Wu, Gloria Manney, and Michael Schwartz, "Aura Microwave Limb Sounder observations of the Northern Annular Mode in the Mesosphere through the Upper Troposphere, *Geophys. Res. Lett, in review*.
- Gloria L. Manney, Michael J. Schwartz, Kirstin Kr¨uger, Michelle L. Santee, Steven Pawson, Jae N. Lee, William H. Daffer, Ryan A. Fuller and Nathaniel Livesey, "Aura Microwave Limb Sounder Observations of Dynamics and Transport During the Record-breaking 2009 Arctic Stratospheric Major Warming, Geophys. Res. Lett, in review
- **Jae N. Lee**, D. T. Shindell, and S. Hameed, "The role of solar forcing in the tropical circulation", J. Climate, in review
- Jae N. Lee, S. Hameed, and D. T. Shindell, "The northern annular mode in summer and its relation to solar activity variations in the GISS ModelE", *Journal of Atmospheric and Solar-Terrestrial Physics* (2007), 70/5,

- 730-741, doi:10.1016/j.jastp.2007.10.012.
- **Jae N. Lee** and S. Hameed, "The Northern Hemisphere Annular Mode in summer, its Physical Significance and its Relation to Solar Activity Variations", *J. Geophys. Res.*, **112**, (D15111) (2007).
- S. Hameed and **Jae N. Lee**, "A mechanism for sun climate connection", *Geophys. Res. Lett.* **32** (L23817), (2005).

7. Conference contributions

- Displacements of the Aleutian Low and the Hawaiian High pressure systems during the solar cycle. *Eos Transactions*, AGU, Fall Meeting v. 84, Abstract SH11E-03. December 8-12, 2003, San Francisco, CA. (presented by Prof. Hameed).
- The Centers of Action and Sun-Climate interaction, SORCE meeting, October 27-29, 2004, Meridith, NH. (presented by Prof. Hameed).
- The Northern Annular modes: a mechanism for sun climate connection, AMS middle atmosphere conference, June 8-10, 2005, Boston, MA. (presented by Prof. Hameed).
- The Northern Annular modes and it's relation to solar cycle in the GISS ModelE, CAWSES symposium, Oct.21-28, 2007, Kyoto, Japan.
- The role of solar forcing in the tropical circulation, Feb. 4-7, SORCE 2008 meeting, Santa Fe, New Mexico

8. References:

 Prof. Sultan Hameed, School of Marine and Atmospheric Science, Stony Brook University

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 Prof. Marvin A. Geller, School of Marine and Atmospheric Science, Stony Brook University

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 Prof. Minghua Zhang, School of Marine and Atmospheric Science, ITPA director, Stony Brook University

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 Dr. Drew T. Shindell, NASA Goddard Institute for space Studies and Columbia University,

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